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| 09/050,808 | 03/30/1998 | YUTAKA MACHIDA | MAT-5860 | 7277 |

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PAPER

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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 09/050,808
Filing Date: March 30, 1998
Appellant(s): MACHIDA, YUTAKA

Lawrence E. Ashery
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 4/26/07 appealing from the Office action
mailed 7/3/06.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is incorrect. The statement of the status of claims should be amended to add the following:

Claims 21-22 are rejected. Claims 2, 7 and 12-20 are objected to.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

| | | |
|-----------|-----------------|--------|
| 5,737,022 | YAMAGUCHI ET AL | 4-1998 |
| 5,539,466 | IGARASHI ET AL | 7-1996 |

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 21-22 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Specifically, independent claims 21 and 22 disclose decoding block N+1 in frame N+1 of successive frames, said method comprising the steps of: evaluating block N of frame N and block N-M of frame N-M of said signal, wherein blocks N-M, N and N+1 are in corresponding locations of frames N-M, N and N+1, respectively, $M \geq 1$; identifying an error in one of block N and block N-M; and using the other of block N and N-M to decode block N+1, wherein the applicants' specification does not disclose or mention these specific terms as specified in claims 21 and 22.

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 21-22 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential elements and steps, such omission amounting to a gap between the elements. See MPEP § 2172.01. The omitted elements are: $N \geq 2$ for the method and apparatus of claims 21-22 to function properly, otherwise, for instance, if $N=1$, and $M=1$, then a non-existent frame 0 would come out for frame $N-M$.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Igarashi (5,539,466) in view of Yamaguchi (5,737,022).

Regarding claims 21 and 22, Igarashi discloses an apparatus and method of decoding block $N+1$ in frame $N+1$ of successive frames (fig.19 is a decoder), said method comprising the steps of:

evaluating block N of frame N and block $N-M$ of frame $N-M$ of said signal, wherein blocks $N-M$, N and $N+1$ are in corresponding locations of frames $N-M$, N and $N+1$, respectively, $M \geq 1$ (see fig.6, note the evaluation of frame $N-M$, where $M \geq 1$, is "former frame", frame N is the "current frame", and frame $N+1$ is "later frame", wherein each frame has a corresponding macroblock in corresponding locations within each frame).

Igarashi does not specifically disclose identifying an error in one of block N and block N-M, and using the other of block N and N-M to decode block N+1. However, Yamaguchi teaches identifying an error in one of the blocks (fig.9A, element 103 and fig.25, element 123; col.6, ln.15-33, Yamaguchi discloses the determining the block that is not decodable from any of the frames, thus, including I, P and B frames, meaning that the previous, present and future frames can have errors identified; fig.8A, block X is the non-decodable block that is identified from the frame data), and using the other blocks for decoding image data (col.8, ln.15-28, Yamaguchi discloses the identification of the non-decodable block X is shown, and the image data with the decodable errorless blocks can be decoded by front prediction, in that the block image data from previous frame N-M ($M=1$) and current frame N can be used to forwardly decode the image data to obtain the future frame N+1). Therefore, it would have been obvious to one of ordinary skill in the art to combine the teaching of Igarashi and Yamaguchi, as a whole, for efficiently coding and decoding image data in an accurate, precise manner (Yamaguchi col.4, ln.38-44).

(10) Response to Argument

Regarding lines 15-20 on page 3 of appellant's arguments, appellant states that the rejection under 35 U.S.C.112, 1st paragraph is traversed. The examiner respectfully disagrees. First, the term "N" is not defined in the claims nor in the specification. Since the term "M" can be any number larger than or equal to one, that means that the term "N-M" can be equal to a number 0 or a negative number. By having the term "N-M" being zero or negative number, there is no such thing as a negative number block or

negative number frame in the field of decoding blocks of frames. Independent claims 21 and 22 disclose decoding block N+1 in frame N+1 of successive frames, said method comprising the steps of: evaluating block N of frame N and block N-M of frame N-M of said signal, wherein blocks N-M, N and N+1 are in corresponding locations of frames N-M, N and N+1, respectively, $M \Rightarrow 1$; identifying an error in one of block N and block N-M; and using the other of block N and N-M to decode block N+1, wherein the applicants' specification does not disclose or mention these specific terms as specified in claims 21 and 22. In other words, claims 21-22 fail to comply with the enablement requirement as set forth in 35 U.S.C. 112, 1st paragraph.

Regarding the last paragraph on page 3 to line 6 on page 4 of appellant's arguments, appellant states that there is no statutory requirement for a specification to mention "specific terms" in the specification relative to the claims. The examiner respectfully disagrees. As previously stated above, when one does not disclose certain crucial, key elements and "specific terms" in the specification as to how does these "specific terms" associated with the claim; one cannot fully comprehend or understand how the present invention functions or how the present invention is enabled if certain crucial, key "terms" are not fully described in the specification. In other words, there is no support for decoding block N+1 in frame N+1 of successive frames, said method comprising the steps of: evaluating block N of frame N and block N-M of frame N-M of said signal, wherein blocks N-M, N and N+1 are in corresponding locations of frames N-M, N and N+1, respectively, $M \Rightarrow 1$; identifying an error in one of block N and block N-M; and using the other of block N and N-M to decode block N+1, wherein the applicants'

specification does not disclose or mention these specific terms as specified in claims 21 and 22. Thus, claims 21-22 fail to comply with the enablement requirement as set forth in 35 U.S.C. 112, 1st paragraph.

Regarding lines 7-12 on page 4 of appellant's arguments, appellant argues that the rejection under 35 U.S.C. 112, 2nd paragraph is traversed. The examiner respectfully disagrees. The term "N" is not defined in the claims nor in the specification. Since the term "M" can be any number larger than or equal to one, that means that the term "N-M" can be equal to a number 0 or a negative number. By having the term "N-M" being zero or negative number, there is no such thing as a negative number block or negative number frame in the field of decoding blocks of frames. Independent claims 21 and 22 disclose decoding block N+1 in frame N+1 of successive frames, said method comprising the steps of: evaluating block N of frame N and block N-M of frame N-M of said signal, wherein blocks N-M, N and N+1 are in corresponding locations of frames N-M, N and N+1, respectively, $M \geq 1$; identifying an error in one of block N and block N-M; and using the other of block N and N-M to decode block N+1, wherein the applicants' specification does not disclose or mention these specific terms as specified in claims 21 and 22. In other words, claims 21-22 are deemed to be non-enabling since the appellant fails to mention what value N can be, the term "N-M" can be even more vague and potentially yielding a negative term for the blocks and frames. Thus, claims 21-22 are incomplete for omitting essential elements and steps, and such omission amounting to a gap between the elements show that the claims fail to comply with the requirements of 35 U.S.C. 112, second paragraph.

Regarding lines 8-13 on page 5 of appellant's arguments, appellant states that Igarashi does not disclose showing a block in corresponding locations of three frames. The examiner respectfully disagrees. Since the appellant does not specifically indicate the specific definition for "corresponding locations" in the instant application disclosure, the examiner considers the "corresponding locations" as defined in MPEG standards. Thus, "corresponding locations" are conventionally referred to as the locations of the macroblock in search area that matches the target macroblock during motion compensation and motion estimation. These matched macroblocks are not located in the locations with the same coordinates in reference frame and target frame, in that Igarashi meets this limitation. Igarashi's figure 6 discloses the evaluation of frame N-M, where $M \geq 1$, is "former frame", frame N is the "current frame", and frame N+1 is "later frame", wherein each frame has a corresponding macroblock in corresponding locations within each frame. Thus, Igarashi meets the broad limitation of the claims 21-22.

Moreover, appellant's specification does not specifically disclose the claimed "corresponding locations" limitation. Also, appellant did not specify in the claims that "corresponding locations" are locations with the same x and y coordinates in blocks N-M, N and N+1. Thus, the examiner interpretations and citations are appropriate, and the rejection is maintained. Since the specification does not specifically show support for the aforementioned limitation, it is not enabling and thus, claims 21-22 are also rejected under 35 U.S.C.112, 1st and 2nd paragraphs. See the above.

Regarding the last paragraph on page 5 to line 7 on page 6 of appellant's arguments, appellant states that the combination of Igarashi and Yamaguchi does not

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disclose the present invention, more specifically error correction occurring in different frames. The examiner respectfully disagrees. Igarashi does not specifically disclose identifying an error in one of block N and block N-M, and using the other of block N and N-M to decode block N+1. However, in column 6, lines 15-33, Yamaguchi discloses that element 103 of figure 9 and element 123 of figure 25 are used for the determination of the block that is not decodable from any of the frames, including I, P and B frames, for recognizing errors in frames. In other words, Yamaguchi discloses that the previous, present and future frames can have errors identified. Also, Yamaguchi's figure 8A discloses that block X is the non-decodable block that is identified from the frame data that can include the present, previous and future frames. Thus, Yamaguchi discloses the error correction occurring in different frames.

(11) Evidence Appendix

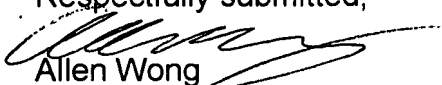
Applicant cited SMSARCH: A Sega Master System Cartridge Archiver.

(12) Related Proceeding(s) Appendix

None.

For the above reasons, it is believed that the rejections should be sustained.


Respectfully submitted,



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